

*This listing of claims will replace all prior versions, and listings, of claims in the application:*

**Listing of Claims:**

**Claim 1 (Previously Presented):** A method to elongate a solder joint, the method comprising:  
forming an elongator on a first substrate, wherein the elongator comprises an expander and an encapsulant to encapsulate the expander, the encapsulant being comprised of a thermoplastic;

forming the solder joint to connect the first substrate to a second substrate; and  
softening the encapsulant to release the expander from a compressed state to elongate the solder joint.

**Claim 2 (Original):** The method to elongate a solder joint as recited in claim 1, wherein forming the elongator on the first substrate comprises:

providing a mold having a first mold cavity and a second mold cavity, wherein the first substrate is disposed in the first mold cavity and an expander is disposed in the second mold cavity;

compressing the expander; and  
introducing the encapsulant into the mold to encapsulate the expander to form the elongator on the first substrate.

**Claim 3 (Original):** The method to elongate a solder joint as recited in claim 2, further comprising:

singulating the first substrate.

**Claim 4 (Original):** The method to elongate a solder joint as recited in claim 3, wherein the first substrate is one of a group consisting of a series of interposers, a series of packages and a wafer.

**Claim 5 (Original):** The method to elongate a solder joint as recited in claim 2, wherein the first substrate is one of a group consisting of a chip, an interposer, a package, a board and a series of interposers.

**Claim 6 (Original):** The method to elongate a solder joint as recited in claim 1, wherein the elongator is formed on the first substrate by one of a group consisting of an injection molding process, a compression molding process, a transfer molding process and a casting process.

**Claim 7 (Original):** The method to elongate a solder joint as recited in claim 1, wherein the encapsulant is an electrical insulator.

**Claim 8 (Canceled).**

**Claim 9 (Previously Presented):** The method to elongate a solder joint as recited in claim 1, wherein forming the solder joint to connect the first substrate to the second substrate comprises:

melting a plurality of solder deposits to wet a solderable surface to form the solder joint.

**Claim 10 (Original):** The method to elongate a solder joint as recited in claim 9, wherein the thermoplastic has a softening temperature of approximately 40°C higher than a melting point of the plurality of solder deposits.

**Claim 11 (Previously Presented):** The method to elongate a solder joint as recited in claim 1, wherein the thermoplastic is one of a group consisting of polyamide and polyacetal.

**Claim 12 (Original):** The method to elongate a solder joint as recited in claim 1, wherein the expander comprises a corrugated strip.

**Claim 13 (Original):** The method to elongate a solder joint as recited in claim 12, wherein a first end of the corrugated strip overlaps a second end of the corrugated strip.

**Claims 14-29 (Canceled).**